## (19) World Intellectual Property Organization

International Bureau



## 

(43) International Publication Date 4 August 2005 (04.08.2005)

**PCT** 

(10) International Publication Number WO 2005/071262 A1

(51) International Patent Classification7:

F03D 11/00

(21) International Application Number:

PCT/DK2005/000014

(22) International Filing Date: 12 January 2005 (12.01.2005)

(25) Filing Language:

Danish

(26) Publication Language:

English

(30) Priority Data: PA200400094

23 January 2004 (23.01.2004) Dk

- (71) Applicant (for all designated States except US): LM GLASFIBER A/S [DK/DK]; Rolles Møllevej\_1, DK-6640 Lunderskov (DK).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DAHL, Morten [DK/DK]; Jens Skyttes Vej 10, DK-6000 Kolding (DK). LILLEHEDEN, Lars, Tilsted [DK/DK]; H.C. Andersens Vej 4, DK-6000 Kolding (DK). HANSEN, Lars, Bo [DK/DK]; Sønderbyen 32, DK-6534 Agerskov (DK).

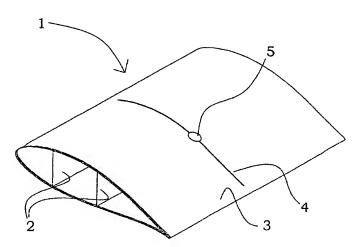
- (74) Agent: ZACCO DENMARK A/S; Aaboulevarden 17, P.O. Box 5020, DK-8100 Arhus C (DK).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

[Continued on next page]

(54) Title: A METHOD OF MANUFACTURING A BLADE FOR A WIND TURBINE AND BLADE COMPRISING SEGMENTED CONDUCTOR MEANS



(57) Abstract: A method of manufacturing a fibre-reinforced blade for a wind energy plant is presented, which blade is configured with at least a blade shell and means for conducting to a lightning current to an earth connection. Novel aspects of the method comprise that the blade is provided with segmented conductor means that are configured for conducting a lightning current outside the blade to the means for conducting to earth; and wherein the conductor means are distributed and secured at the external surface of the blade shell in such a manner that the conductor means are essentially flush with the external surface of the blade shell. When the segmented conductor means are distributed and attached at the external surface of the blade shell, the lightning current will not have to be conducted through the conductor means, but rather they are conducted in a ionised passage in the air above the conductor means.

3

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.